Water-Efficient Branding & Conservation

Jan Bush, ASU School of Planning & Landscape Architecture MEP graduate student

Market Enhancement Opportunities for Water-Efficient Products
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at the Wyndham Hotel, Phoenix, AZ
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Look at the big picture…

Conceptually, a branding program wants to establish this claim with consumers:

$$W + P_{wet} + S_{wet} \leq W + P_e + S_e$$

where W = costs of acquiring and disposing of water

P = cost of plumbing, irrigation, conveyance, and treatment products

S = cost of design, installation, and operation services

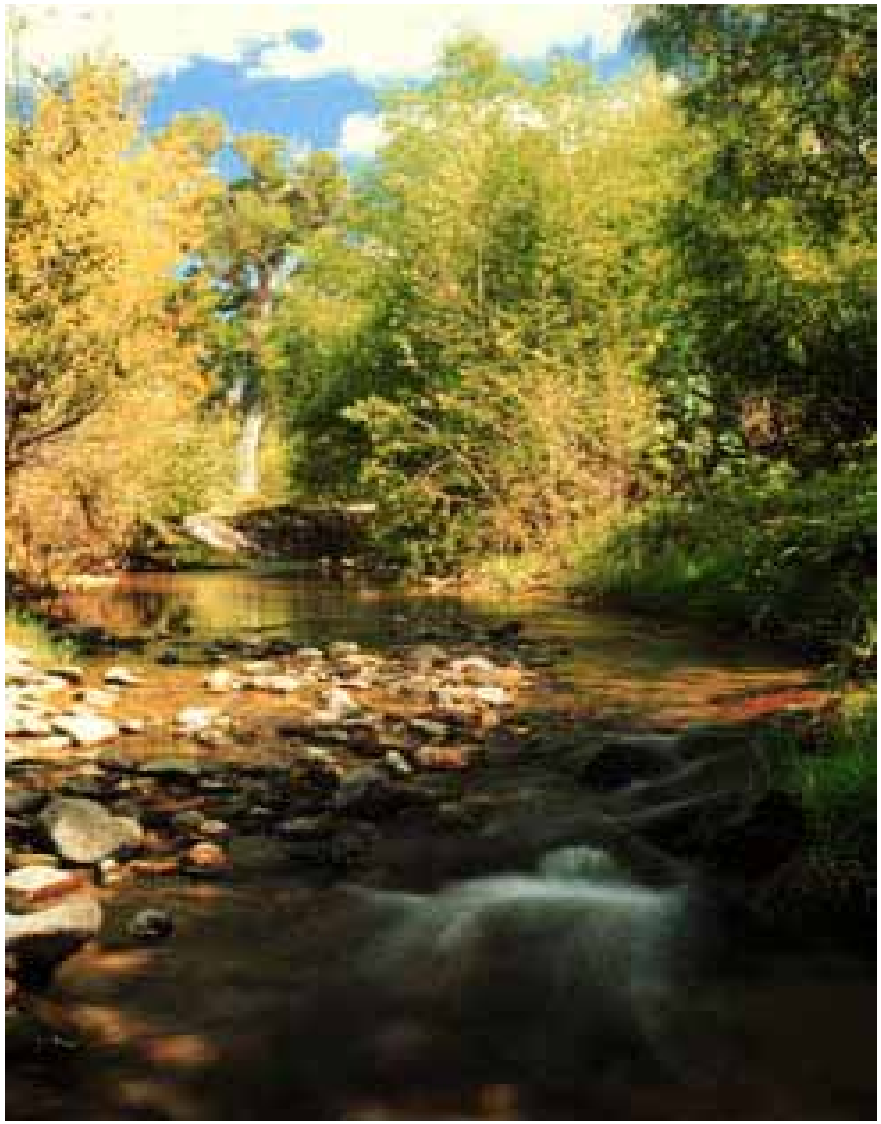
$_{wet}$ = water efficient technologies

$_e$ = existing technologies

Marginal Costs for the consumer

- Incremental increase in costs of *wet* products and services created by product development and training for personnel

- Opportunity costs—what alternate purchase did consumer forego to buy *wet* products/services?



Patagonia State Natural Area, Arizona

Marginal Benefits for the consumer

- Incremental increase in savings—avoids additional cost of infrastructure, pollution control, treatment, and drought management
- Incremental decrease in anomie*—avoids anxiety and isolation by using the recognized standard of conduct

*anomie: (Greek for lawlessness) condition of society or individual in which normative standards of conduct and belief are weak or missing

Tonto Natural Bridge State Park, Arizona

Potential…

for an additional marginal benefit:

Incremental increase in personal conservation. Consumer buys products/services and contributes to the protection of the ecosystem processes and interactions that produce the water.

Why bother with this?

- People do not produce water. Natural systems do. When natural systems lose their functions, they produce less water, poor water, or no water. Ecosystem protection is a good reason to produce, sell, buy and use water-efficient irrigation systems.

- Local economies depend on healthy, water-based ecosystems. Tourism is a major industry in Arizona and the Southwest. And every other major industry depends on our quality of life to attract and retain qualified employees.

Economy depends on environment

Consumers recognize that the economy is dependent on the environment. There are visible linkages like tourism and jobs in the extractive industries, as well as critical but less visible linkages to environmental services like drainage, flood control and clean air.

Economic Impact Research for Arizona

Orr, P. and Colby, B. (2002). *Nature-Oriented Visitors and Their Expenditures: Upper San Pedro River Basin,* University of Arizona, estimated total local economic output of $17-28 million. Available at http://ag.arizona.edu/arec/pubs/

A study from 2001 for Arizona Game and Fish Department conducted by Southwick Associates estimated total economic output of $1.5 billion from non-consumptive wildlife related recreation in Arizona. A second AGFD study is an Arizona State University analysis of commercial activity generated by hunters and anglers, estimated at $1.3 billion. The AGFD studies estimated a combined state tax contribution of over $100 million yearly.

Available at www.azgfd.state.az.us

…and that the environment is at risk.

Statistics for Federally Listed Water-Dependent Species
by Arizona County

Apache	71% (12 of 17 species)	Mohave	55% (11 of 20 species)
Cochise	65% (15 of 23 species)	Navajo	71% (10 of 14 species)
Coconino	55% (12 of 22 species)	Pima	54% (13 of 24 species)
Gila	79% (15 of 19 species)	Pinal	71% (12 of 17 species)
Graham	72% (13 of 18 species)	Santa Cruz	68% (15 of 22 species)
Greenlee	73% (11 of 15 species)	Yavapai	76% (13 of 17 species)
La Paz	100% (9 of 9 species)	Yuma	88% (7 of 8 species)
Maricopa	67% (10 of 15 species)		

Source: U.S. Fish & Wildlife Service Ecological Services Office, Phoenix Arizona. Derived from data available online at http://arizonaes.fws.gov

Suggested strategy:

Strengthen the connection between a program to brand water-efficient products/services and conservation of the local water resource.

- Work with local nonprofit professional or water resource groups to learn about the resource and design/deliver a training module in the certification program for designers, installers and operators.
  - » Watershed associations
  - » Professional societies
  - » Land trusts

- Donate a portion of receipts from the sale of branded products and services for conservation of the local water resource.

Summary

Slide Rock State Park, Arizona

Look at the big picture. A program to accomplish $W + P_{wet} + S_{wet} \leq W + P_e + S_e$ needs one more step.

Success includes strengthening consumers' connection of their purchase/use of branded products/services with conservation of the local water resource.